

ANTELOPE VALLEY DRAINAGE FEE INCREASE – COST BASIS SUMMARY

Below is a summary of the actions taken to justify the drainage impact fee associated with land available for subdivision into residential lots and commercial/industrial acreage within the unincorporated portions of Los Angeles County in the Antelope Valley Drainage Area.

1. Public Works' Mapping and Property Management Division produced a digital version of the 1987 Antelope Valley Drainage Study map. They then determined the amount of open channel, closed conduit, and detention/retention basins required within the unincorporated portions of the Antelope Valley (**32 miles of open channel; 22 miles of closed conduit; 8 detention/retention basins**).
2. Public Works' Mapping and Property Management Division then used the Los Angeles County Department of Regional Planning's Zoning Ordinance Summary to develop a table depicting undeveloped unincorporated area and the planned zoning.
3. Public Works then determined the **total number of developed single-family lots (7,107), multi-family lots (715), and the commercial/industrial acreage (980)** within unincorporated areas of the Antelope Valley. Developed land was assumed to have an improvement value equal or greater than \$5,000.
4. Public Works' Design Division provided cost estimates for open channel and closed conduit piping. Several assumptions were used to develop the cost estimates, including: a) bridge structures over channel at street crossings are not included in the cost estimate due to lack of specific site information; b) unit price provided is based on June 2006 costs; and c) the estimated costs are for the installation of the drain under NORMAL conditions, not to include street improvements, BMP implementation, or right-of-way acquisition. **The linear cost per foot estimates for a 12-foot wide by 8-foot high open channel and a 72-inch closed conduit pipe were \$1,106.49 and \$656.45, respectively.**
5. Public Works' Watershed Management Division derived cost estimates for detention/retention basins. Several assumptions were used to develop the detention/retention basin cost estimates. Costs were broken into the following three categories: 1) ROW acquisition; 2) excavation; and 3) infrastructure costs. **A cost of \$22,201,861.78 was estimated for each detention/retention basin.**
6. WMD used the linear cost per foot for open channel and closed conduit piping, and the total length of open channel and closed conduit piping required, and added the 8 detention/retention basin costs, to determine a construction cost subtotal. We then added 25% for design and construction management to arrive at **a total cost of \$551,025,845.80, of which \$483,376,584.75 is attributable to future development.** **Attachment 1** details the amendments in detail to the Antelope Valley Final Report on the Comprehensive Plan of Flood Control and Water Conservation, June 1987.
7. For comparison purposes, the Cities of Palmdale and Lancaster currently charge approximately \$4,000 per residential lot developed within city boundaries. We determined that a fee of **\$5,500 per residential lot, \$2,750 per multi-family lot, and \$27,500 commercial/industrial acreage** will meet the capital construction costs for the construction of 32 miles of open channel, 22 miles of closed conduit piping (**please refer to Attachment 1**), and the 8 detention/retention basins.